**BRUHATH BANGALORE MAHANAGARA PALIKE**

**DASARHALLI ZONE**

**DIVISION:- DASARAHALLI DIVISION**

**SUB DIVISION:- SHETTYHALLI SUB DIVISION**

**NAME OF WORK**:- Improvements to Concrete drain in Gate Palya in Ward No.12, Shettyhalli Sub Divison.

**Estimated Cost:-** 70.00 Lakhs

**P code:-** P1878

**Estimated Cost:-** 012-20-000038

**Name of Work:-** Improvements to Concrete drain in Gatepalya Shettyhalli in ward No.12 Shettyhalli Sub Division.

## ತಾಂತ್ರಿಕ ವರದಿ

ದಾಸರಹಳ್ಳಿ ವಿಧಾನ ಸಭಾ ಕ್ಷೇತ್ರದ ವಾರ್ಡ್ ನಂ.12 ರ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ವಾರ್ಡ್ ನಂ.12 ರ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್‌ನ ಶೆಟ್ಟಿಹಳ್ಳಿ ರೈಲ್ವೇಗೇಟ್‌ನ 3, 4, 5, 6 & 7ನೇ ಅಡ್ಡರಸ್ತೆಗಳಲ್ಲಿ ಬಿ.ಡಬ್ಲ್ಯೂ.ಎಸ್.ಎಸ್.ಬಿ ವತಿಯಿಂದ ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಕಲ್ಪಿಸಲು ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೆತ್ತಿಕೊಂಡಿದ್ದು, ಕಾವೇರಿ ನೀರು ಸರಬರಾಜು ಕಾಮಗಾರಿಯು ಪೂರ್ಣಗೊಂಡಿದ್ದು, ಒಳಚರಂಡಿ ಕಾಮಗಾರಿಯು ಭಾಗಶಃ ಪೂರ್ಣಗೊಂಡಿರುತ್ತದೆ. ಇದರಿಂದಾಗಿ ಹಾಲಿ ಕಾಂಕ್ರೀಟ್ ರಸ್ತೆಗಳು ಪೂರ್ಣ ಪ್ರಮಾಣದಲ್ಲಿ ಹಾಳಾಗಿರುವುದರಿಂದ ಸ್ಥಳೀಯ ನಿವಾಸಿಗಳು & ನಗರ ಪಾಲಿಕೆ ಸದಸ್ಯರು ಸಂಪೂರ್ಣ ರಸ್ತೆ ಹಾಳಾಗಿರುವುದರಿಂದ ಹೊಸದಾಗಿ ಸಿ.ಸಿ. ರಸ್ತೆ ಅಳವಡಿಸಲು ಕೋರಿರುತ್ತಾರೆ. ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದ ಜನಸಂಖ್ಯೆ ಶೇಕಡ 50%ಕ್ಕಿಂತ ಹೆಚ್ಚಾಗಿ ವಾಸಿಸುತ್ತಿದ್ದು ಸದರಿ ಬಾಕಿ ಉಳಿದ ರಸ್ತೆಯನ್ನು ಬಿಬಿಎಂಪಿ ವತಿಯಿಂದ ಈ ಅನುದಾನದಲ್ಲಿ ಅಭಿವೃದ್ಧಿಪಡಿಸಲು ಸದರಿ ರಸ್ತೆಗೆ Improvements to Concrete drain in Gatepalya Shettyhalli in ward No.12 Shettyhalli Sub Division ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ಅವಶ್ಯಕವಾಗಿರುವುದರಿಂದ ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗೆ ರೂ. 70.00 ಲಕ್ಷಗಳನ್ನು ಪಿಕೋಡ್-ಪಿ1878 ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದ 24.10% ಅನುದಾನದಲ್ಲಿ ಜಾಬ್‌ಕೋಡ್ ಸಂಖ್ಯೆ: 012-20-000038 ರಲ್ಲಿ ಅನುವು ಮಾಡಿಕೊಳ್ಳಲಾಗಿದೆ.

ಮುಂದುವರೆದಂತೆ, 2018-19 ನೇ ಸಾಲಿನ ಪಿಕೋಡ್-ಪಿ1878 ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದ 24.10% ಮೀಸಲಿಡಲಾದ ಅನುದಾನದಲ್ಲಿ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್‌ನಲ್ಲಿ ಗೇಟ್‌ಪಾಳ್ಯ ರಸ್ತೆಗಳಿಗೆ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗಳು ಅವಶ್ಯಕವಾಗಿರುವುದರಿಂದ ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗೆ ರೂ. 70.00 ಲಕ್ಷಗಳ ಅನುದಾನವನ್ನು ಅನುವು ಮಾಡಿಕೊಂಡು ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಉಪಯೋಗಿಸಿಕೊಂಡು ಕ್ರಮವಹಿಸಲು ಅಂದಾಜಿನಲ್ಲಿ ಉದ್ದೇಶಿಸಲಾಗಿದೆ.

**ಅಂದಾಜಿನಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.**

1. Removing B.S. slab of Drain and stacking
2. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil.
3. Providing and laying in position plain cement concrete of Mix 1:3:6.
4. Providing and laying Design mix M25.
5. Providing T.M.T. steel reinforcement for R.C.C. work.
6. Providing and fixing Precast RCC cover slabs of 100 mm & 250 mm.
7. Dismantling of cement concrete pavement
8. Construction of granular sub-base Grading-V as Sub-base
9. Providing and Constructing dry lean cement concrete mix CC 1:5:10 base
10. Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30
11. Providing and fixing RCC name board etc.,

ಮೇಲ್ಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಂಡು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಬೆಂಗಳೂರು ವೃತ್ತದ 2018-19 ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯಂತೆ ರೂ. 70.00 ಲಕ್ಷಗಳಿಗೆ ಅತೀ ಸೂಕ್ಷ್ಮ ಮತ್ತು ಸರಳತೆ ಅನುಸರಿಸಿ ಅಂದಾಜನ್ನು ತಯಾರಿಸಲಾಗಿದೆ.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ವಾರ್ಡ್ ನಂ.12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ

**Name of Work:- Improvements to Concrete drain in Gatepalya Shettyhalli in ward No.12 Shettyhalli Sub Division.**

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Removing B.S. slab of Drain and stacking. (PW,P& IWTD SR 2018-19, Pg No 27 Item No. 5.32) | | | | | | | | | | |
| | **Drain** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 2 | 65.00 | 1.50 | | 195.00 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 2 | 82.00 | 1.50 | | 246.00 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 2 | 62.00 | 1.50 | | 186.00 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 2 | 37.00 | 1.50 | | 111.00 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 2 | 69.50 | 1.50 | | 208.50 | | |
| | | | | | | | | | **946.50** | | |
| | **Considering 50%** | | | | | | | **Total** | **473.25** | **104.94** | **49,662.86** |
| | | | | | | | | | **Sqm** | | |
| 2 | Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods etc., MORTH / Chapter 3 complete as per specifications and as per the direction of Engineer-in-charge of the work. (PW,P& IWTD SR 2018-19, Pg No 143 Item No.19.10) | | | | | | | | | | |
| | **For Drain** | | | | | | | | | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 2 | 37.00 | 1.00 | 0.45 | 33.30 | | |
| | 7th Cross Road | 0.00 | 40.00 | Cum | 2 | 40.00 | 1.00 | 0.45 | 36.00 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 2 | 82.00 | 1.00 | 0.45 | 73.80 | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 2 | 65.00 | 1.00 | 0.45 | 58.50 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 2 | 62.00 | 1.00 | 0.45 | 55.80 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 2 | 37.00 | 1.00 | 0.45 | 33.30 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 2 | 69.50 | 1.00 | 0.45 | 62.55 | | |
| | **Culvert** | | | Cum | 1 | 6.00 | 1.20 | 1.00 | 7.20 | | |
| | **Total** | | | | | | | **Total** | **360.45** | **137.80** | **49,670.01** |
| | | | | | | | | | **Cum** | | |
| 3 | KSRB 4-1.7: Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (PW,P& IWTD SR 2018-19 P-13, I-4.7) | | | | | | | | | | |
| | **For Drain** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 2 | 65.00 | 1.00 | 0.15 | 19.50 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 2 | 82.00 | 1.00 | 0.15 | 24.60 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 2 | 62.00 | 1.00 | 0.15 | 18.60 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 2 | 37.00 | 1.00 | 0.15 | 11.10 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 2 | 69.50 | 1.00 | 0.15 | 20.85 | | |
| | **Culvert** | | | Cum | 1 | 6.00 | 1.20 | 0.15 | 1.08 | | |

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Total | 95.73 | 5714.97 | 547,094.08 |
| | | | | | | | | | Cum | | |
| 4 | KSRRB M2200-5.12 Providing and laying Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.7 cum and fine aggregates @ 0.47 cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed 2008, i) Upto 5 m height. (PW,P& IWTD SR 2018-19 P 227, 1.28.7.12) | | | | | | | | | | |
| | **Drain Raft** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 2 | 65.00 | 0.90 | 0.15 | 17.55 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 2 | 82.00 | 0.90 | 0.15 | 22.14 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 2 | 62.00 | 0.90 | 0.15 | 16.74 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 2 | 37.00 | 0.90 | 0.15 | 9.99 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 2 | 69.50 | 0.90 | 0.15 | 18.77 | | |
| | **Drain Wall** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 4 | 65.00 | 0.15 | 0.60 | 23.40 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 4 | 82.00 | 0.15 | 0.60 | 29.52 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 4 | 62.00 | 0.15 | 0.60 | 22.32 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 4 | 37.00 | 0.15 | 0.60 | 13.32 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 4 | 69.50 | 0.15 | 0.60 | 25.02 | | |
| | **CulvertRaft** | | | Cum | 1 | 6.00 | 1.20 | 0.20 | 1.44 | | |
| | **CulvertRaft** | | | Cum | 2 | 6.00 | 0.20 | 0.60 | 1.44 | | |
| | | | | | | | | **Total** | **201.65** | **5775.38** | **1,164,576.50** |
| | | | | | | | | | **Cum** | | |
| 5 | KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 -do- TMT Bars Fe 500(PW,P& IWTD SR 2018-19, Pg No 229 Item No.28.8.2) | | | | | | | | | | |
| | **Quantity at 50 kg/ Cum** | | | | Drain concrete quantity | | | 180.18 | **9.01** | | |
| | **Quantity at 80 kg/ Cum** | | | | Culvert concrete quantity | | | 2.88 | **0.23** | | |
| | | | | | | | | **Total** | **9.24** | **75223.96** | **695,024.26** |
| | | | | | | | | | **MT** | | |
| 6 | Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges , curing and concrtee finished surface on both sides etc, and complete as per the directions of Enginner in charges. (Data Rate) | | | | | | | | | | |
| | **Drain** | | | | | | | | | | |

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3rd Cross Road | 0.00 | 65.00 | Sqm | 2 | 65.00 | 0.90 | | 117.00 | | |
| | 4th Cross Road | 0.00 | 82.00 | Sqm | 2 | 82.00 | 0.90 | | 147.60 | | |
| | 5th Cross Road | 0.00 | 62.00 | Sqm | 2 | 62.00 | 0.90 | | 111.60 | | |
| | 6th Cross Road | 0.00 | 37.00 | Sqm | 2 | 37.00 | 0.90 | | 66.60 | | |
| | 7th Cross Road | 0.00 | 69.50 | Sqm | 2 | 69.50 | 0.90 | | 125.10 | | |
| | | | | | | | | **Total** | **567.90 Sqm** | **1523.00** | **864,911.70** |
| 7 | Providing and fixing Precast RCC slab of 250mm thick for Culverts made of Plain/Reinforced Cement Concrete design mix M25 with OPC @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregates @ 0.47cum, with superplasticizer @3lts confirming to 189103-1999 Reaffirmed-2008,0pen Foundation complete as per Drawing and Technical Specification including cost of all [10] materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications and pointing for joints 1:3 cement mortar including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per the directions of Engineer in-Charge. (Data Rate) | | | | | | | | | | |
| | **For Culvert** | | | Sqm | 1 | 6.00 | 1.00 | | 6.00 | | |
| | | | | | | | | **Total** | **6.00 Sqm** | **3083.68** | **18,502.08** |
| 8 | KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of [11] dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications. MORTH Specification No. 202 ( PW,P & IWTD SR 2018-19, Item No. 18.47, Page No.140) | | | | | | | | | | |
| | **CC Pavement Dismantling** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 1 | 65.00 | 2.90 | 0.10 | 18.85 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 1 | 82.00 | 3.20 | 0.10 | 26.24 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 1 | 62.00 | 3.20 | 0.10 | 19.84 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 1 | 37.00 | 3.80 | 0.10 | 14.06 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 1 | 69.50 | 3.20 | 0.10 | 22.24 | | |
| | **Total** | | | | | | | **Total** | **101.23 Cum** | **952.94** | **96,466.12** |
| 9 | KSRRB 300-48. Scarifying kankar / gravel / metal crust by mechanical means upto 150mm thick, disposal of [12] stuff including cost of all labour charges, HOM complete as per specifications. MORTH / Chapter 3 ( PW,P & IWTD SR 2018-19, Item No. 19.54, Page No.146) **For Road formation** | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Sqm | 1 | 65.00 | 4.50 | | 292.50 | | |
| | 4th Cross Road | 0.00 | 82.00 | Sqm | 1 | 82.00 | 5.00 | | 410.00 | | |
| | 5th Cross Road | 0.00 | 62.00 | Sqm | 1 | 62.00 | 5.00 | | 310.00 | | |
| | 6th Cross Road | 0.00 | 137.00 | Sqm | 1 | 37.00 | 6.20 | | 229.40 | | |

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7th Cross Road | 0.00 | 69.50 | Sqm | 1 | 69.50 | 5.00 | | 200.00 | | |
| | Total | | | | | | | Total | 1441.90 | 25.44 | 36,681.94 |
| | | | | | | | | | Sqm | | |
| 10 | KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring 13 during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.64) | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | sqm | 1 | 65.00 | 4.50 | | 292.50 | | |
| | 4th Cross Road | 0.00 | 82.00 | sqm | 1 | 82.00 | 5.00 | | 410.00 | | |
| | 5th Cross Road | 0.00 | 62.00 | sqm | 1 | 62.00 | 5.00 | | 310.00 | | |
| | 6th Cross Road | 0.00 | 37.00 | sqm | 1 | 37.00 | 6.20 | | 229.40 | | |
| | 7th Cross Road | 0.00 | 69.50 | sqm | 1 | 69.50 | 5.00 | | 347.50 | | |
| | Total | | | | | | | Total | 1589.40 | 6.36 | 10,108.58 |
| | | | | | | | | | Sqm | | |
| 11 | Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.etc., complete as per specifications and as per the direction of Engineer-in-charge of the work. (PW,P& IWTD SR 2018-19, Pg No 153 Item No.20.5) | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 1 | 65.00 | 4.50 | 0.15 | 43.88 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 1 | 82.00 | 5.00 | 0.15 | 61.50 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 1 | 62.00 | 5.00 | 0.15 | 46.50 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 1 | 37.00 | 6.20 | 0.15 | 34.41 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 1 | 69.50 | 5.00 | 0.15 | 52.13 | | |
| | Total | | | | | | | Total | 238.41 | 1994.92 | 475,608.88 |
| | | | | | | | | | Cum | | |

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **CONCRETE PAVEMENT KSRRB M600- Cement Concrete Pavements** | | | | | | | | | | |
| 12 | KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (PW,P& IWTD SR 2018-19 P-174, I-22.1.2) | | | | | | | | | | |
| | DLC For CC Road | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 1 | 65.00 | 4.50 | 0.15 | 43.88 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 1 | 82.00 | 5.00 | 0.15 | 61.50 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 1 | 62.00 | 5.00 | 0.15 | 46.50 | | |
| | 6th Cross Road | 0.00 | 37.00 | Cum | 1 | 37.00 | 6.20 | 0.15 | 34.41 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 1 | 69.50 | 5.00 | 0.15 | 52.13 | | |
| | **Total** | | | | | | | **Total** | **238.41** | **3944.51** | **940,410.63** |
| | | | | | | | | | **Cum** | | |
| 13 | Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to18:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation 16 including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades,textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. (PW,P& IWTD SR 2018-19, Pg No | | | | | | | | | | |
| | 3rd Cross Road | 0.00 | 65.00 | Cum | 1 | 65.00 | 4.50 | 0.13 | 36.56 | | |
| | 4th Cross Road | 0.00 | 82.00 | Cum | 1 | 82.00 | 5.00 | 0.13 | 51.25 | | |
| | 5th Cross Road | 0.00 | 62.00 | Cum | 1 | 62.00 | 5.00 | 0.13 | 38.75 | | |

| Sl. No. | Description of Work | Chainage from | Chainage to | Unit | No. | Length (m) | Breadth | Depth (m) | Quantity | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6th Cross Road | 0.00 | 37.00 | Cum | 1 | 37.00 | 6.20 | 0.13 | 28.68 | | |
| | 7th Cross Road | 0.00 | 69.50 | Cum | 1 | 69.50 | 5.00 | 0.13 | 43.44 | | |
| | **Total** | | | | | | | **Total** | **198.68** | **5354.02** | **1,063,709.92** |
| 14 | Providing and fixing RCC name board of size 1.35xk0.60x0.04 mtrs fixed Each 5,500.00 in reinforced cement concrete poles of size 0.10x0.10x2.60mtrs in cement concrete M 20 proportion using 20mm and down size graded metal machine mixed with 10mm dia main steel bars and 8mm dia stirups. The board shall be provided with 12mm thick cement plaster in cement mortar 1:3 on both the sides. The poles shall be embedded in the ground for a depth of 0.5 mtrs with cement concrete M 10 proportion. The board shall be fixed as per the drawing and at the place indicated by the Engineer incharge of the work. The cost includes excavation, bare cost of all materials, cost of steel, centering, transportation charges, fixing charges, labour, HOM etc., The work shall be carried out as per the detailed specifications, drawings and directions of the Engineer in charge of the work. (PW,P& IWTD SR 2018-19, Pg No 271 Item No. 37.60) | | | | | | | **Cum** | **3.00** | | |
| | | | | Cum | | | | **Total** | **3.00** | **5830.00** | **17,490.00** |
| | | | | | | | | | **Each** | | |
| | | | | | | | | | | **Total** | **6029917.55** |
| | | | | | | | | | | KRIDL Charges @ 4 % on Construction cost | **241196.70** |
| | | | | | | | | | | GST at 12% of Tender Amount | **723590.11** |
| | | | | | | | | | | Miscellaneous & unforeseen charges | **5,295.65** |
| | | | | | | | | | | **Grand Total** | **7000000.00** |

**CERTIFICATE**

i This work comes within BBMP limits

ii Certified that Personaly Inspected the Work Spot.

iii Certified that the estimate is prepared based on CSR of PWD

iv Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way.

v This work is not included in any other program of work.

**Assistant Engineer**
**Ward No.12**
**BBMP, Bengaluru**

**Assistant Executive Engineer**
**Shettyhalli Sub Division**
**BBMP, Bengaluru**

**Executive Engineer**
**Dasarahalli Division**
**BBMP, Bengaluru**

ADMINISTRATIVELY SANCTIONED FOR Rs. 70.00 Lakhs
(Rupees Seventy Lakhs Rupees Only)
Under the Head of Account 24.10 Grt SCP/TSP P-1878
Registered as no EE(D.D.)/82/20-82 Subject to conditions contained in Enclosed Memo No. 76 / 2020-21 Dt: 05/06/2020
JE/AE. Exe. Engr (DASARAHALLI) BBMP

Technically Sanctioned For Rs: 70.00 Lakhs
Rs. In Words Seventy Lakhs Rupees Only
Under SC/ST 24.10 Grt P-1878
Job Code No. 012-20-000038
Registered as SE No. 86/15-20/32 subject to conditions contained in Enclosed Memo No. 84 / 2019-20 Dt. 28-05-2020
AE / JE TA SE(D)

Name of Work:- Improvement to Cement drains in Gatpalya, Shettyhalli in Ward No. 12, Shettyhalli Subdivision